

Liquid crystal display

Publication number: CN1354383

Publication date: 2002-06-19

Inventor: GVN SONG CHANG (KR)

Applicant: SAMSUNG ELECTRONICS CO LTD (KR)

Classification:

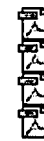
- international: **G02F1/139; G02F1/1333; G02F1/1337; G02F1/1339; G02F1/1343; G02F1/13; (IPC1-7): G02F1/1333; G02F11/335; G02F11/343; G02F11/36**

- European: G02F1/1333D; G02F1/1339B

Application number: CN20011043143 20011004

Priority number(s): KR20000058288 20001004

Also published as:



US2002039166 (A1)

KR20020027709 (A)

JP2002162627 (A)

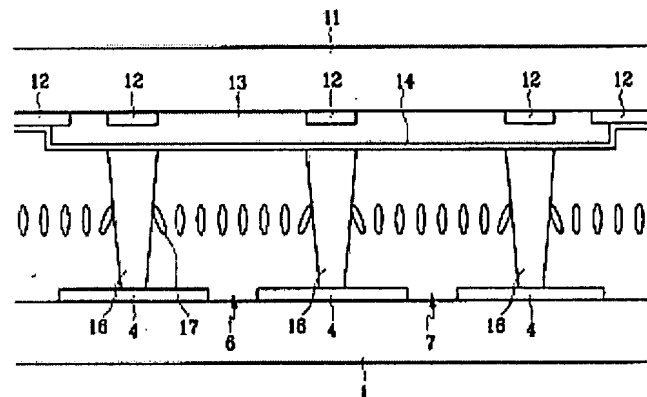
CN1189776C (C)

[Report a data error here](#)

Abstract not available for CN1354383

Abstract of corresponding document: **US2002039166**

A liquid crystal display includes a first insulating substrate, thin film transistors formed on the first insulating substrate, and pixel electrodes connected to the thin film transistors each with an opening pattern. A second insulating substrate faces the first insulating substrate. A black matrix and color filters are formed on the second insulating substrate, and a common electrode covers the black matrix and the color filters. A protrusion pattern is formed on the common electrode. The protrusion pattern is pillar-shaped with top and bottom sides. The top and bottom sides of the protrusion pattern are shaped with a circle, a rectangle, or a rectangle with curved edges. The protrusion pattern includes a protrusion having a relatively small thickness, and a protrusion having a relatively large thickness. The former protrusion is used for domain partitioning, and the latter protrusion is used as a spacer. A vertical alignment layer is internally formed on the substrates, and a liquid crystal is injected in-between the substrates. Polarizing plates are externally attached to the substrates, respectively. A bi-axial film and a $\lambda/4$ plate are interposed between the respective substrates and the respective polarizing plates. The bi-axial film and the $\lambda/4$ plate transform the linear-polarizing into a circular polarizing.



Data supplied from the esp@cenet database - Worldwide